

January 6, 2011

Mr. John Davidson, Senior Planner City of San Jose Planning Division 200 East Santa Clara Street San Jose, California 95113-1905 PD 01-079

RE: Legacy America Center Burrowing Owl Habitat Monitoring Report

Dear Mr. Davidson:

On behalf of the landowner and permittee, Legacy Partners Commercial, we are enclosing a copy of the Year 10 Annual Monitoring Report for the burrowing owl mitigation site at the Legacy America Center project site in San Jose, California. This report has been written as specified in the Legacy America Center Burrowing Owl Habitat Management Plan prepared in 2000 by H.T. Harvey and Associates.

Annual maintenance and monitoring of the owl mitigation site has taken place for ten years (2002-2011) as required in the *Management Plan*. During these ten years owl burrows have been cleaned and/or repaired as needed, mowing of weeds to improve adjacent habitat conditions has been conducted, and owl perches have been installed or replaced when damaged. Wildlife usage of the site has been recorded during maintenance visits. An annual report has been prepared each of the ten years. Burrowing owls have occupied these burrows at times over the past five years, but do not appear to be using the site for breeding.

Upon completion of this Year 10 Annual Monitoring Report, we are recommending that the monitoring phase of this mitigation effort has been completed. We are requesting that the City provide a very brief letter signing off on the completion of this mitigation obligation. We will continue the annual monitoring on Legacy Partner Commercial's behalf as a good faith effort until we receive confirmation from the City that all mitigation obligations have been fulfilled and no further actions are needed related to burrowing owl mitigation monitoring at the America Center site.

Please call me if you have any questions or require further clarification of any issues covered in this report. Thank you for your assistance with this project.

Sincerely,

Spencer Badet

Biologist

cc: Kellie St. Clair, Legacy

Burrowing Owl Mitigation Monitoring Year 10 Annual Report

LEGACY AMERICA CENTER OPEN SPACE PRESERVE SAN JOSE, SANTA CLARA COUNTY CALIFORNIA

Prepared For:

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Date:

December 2011





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1.0 INTRODUCTION

In 2002, Legacy Partners ("Legacy") constructed a burrowing owl (*Athene cunicularia*) mitigation habitat site on the Legacy Terrace Development Open Space Preserve, also known as America Center. The project site is located west of the intersection of Gold Street and Channel Drive in the Alviso District of the City of San Jose, Santa Clara County, California (Figure 1). San Tomas Aquino Creek is approximately 200 feet south of the mitigation site, and a service road lies between the mitigation site and the San Francisco Bay salt ponds to the north.

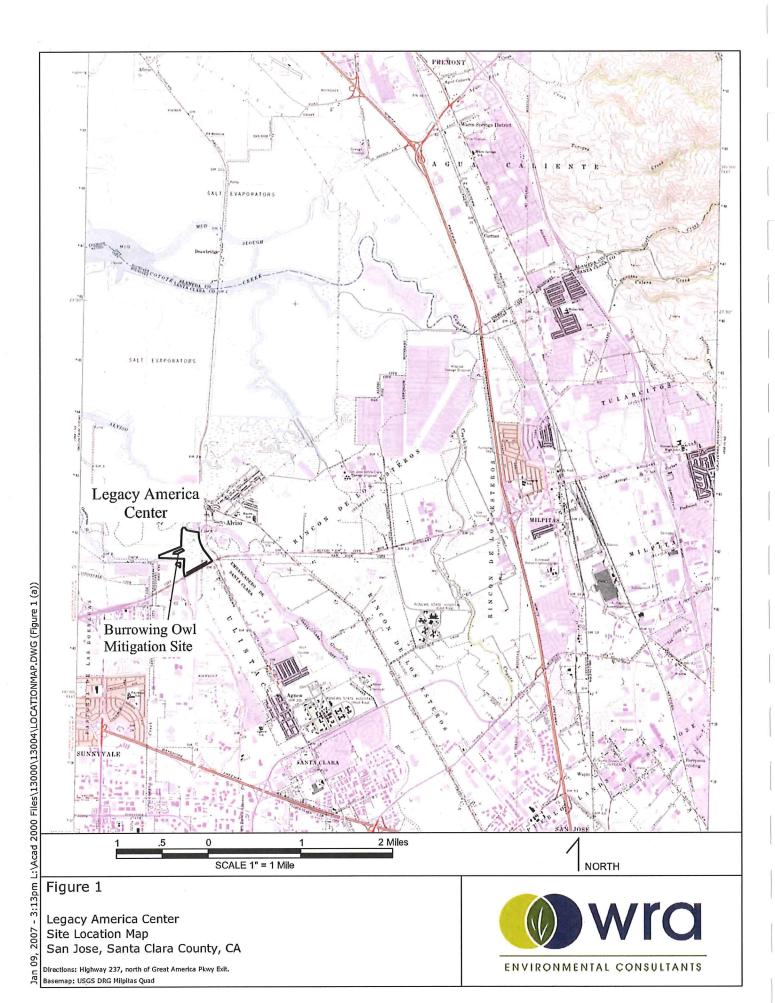
The burrowing owl mitigation habitat consists of 25.3 acres of open space preserve managed as foraging habitat, and includes 6.5 acres of potential burrowing owl breeding habitat. Twenty-six artificial burrows are located in the mitigation area (Section 5.1), situated around two earthen mounds approximately four feet in height and 150 feet in length.

2.0 METHODS

According to the *Draft Burrowing Owl Habitat Management Plan*, prepared by H.T. Harvey & Associates in July 2000, nesting habitat for burrowing owl should be monitored by a qualified biologist three to four times annually; minimally, once during the non-nesting season (September through January), and three times during the nesting season, preferably once at the beginning of the season (March-April), once at the height of the season (May-June), and once at the end of the season (July-August). All artificial burrows must be maintained on an annual basis prior to the start of the nesting season in February. An annual report is submitted to the City of San Jose at the end of each year.

Monitoring events consist of performing reconnaissance level surveys to determine the presence or absence of burrowing owls. Prior to each site visit, a search of the California Department of Fish and Game Natural Diversity Database (CNDDB) is conducted to determine if burrowing owl occurrences have been reported within or adjacent to the Legacy Terrace Development Open Space Preserve. During each site visit, the burrowing owl breeding habitat is initially observed from a distance with the aid of a spotting scope or binoculars. The site is then traversed on foot and observations are made around the artificial burrows for signs of potential use, such as owl pellets, owl feathers, prey remains, eggshell fragments, and/or excrement. Observations are also made for signs indicating owl absence such as spider webs and debris inside the burrow entrances.

Maintenance is conducted during monitoring visits as necessary. Each burrow is inspected, and burrows requiring cleaning or clearing are excavated, cleaned, and reinstalled. Vegetation surrounding the burrows is trimmed or removed by hand throughout the year. Minor repairs, such as replacing and re-labeling posts and clearing surface debris, are also performed.



3.0 RESULTS

Burrowing owl monitoring was performed by WRA biologist Spencer Badet on February 24, April 19, June 9, August 18, and November 23, 2011. Maintenance activities were also performed during most site visits.

One burrowing owl was observed using the created habitat at the Legacy Terrace Development Open Space Preserve on February 24, 2011. Owls were never directly observed using the artificial burrows prior to December 10, 2010, and the lone male owl observed in early 2011 was likely the same individual observed in late 2010. No further observations of resident owls were made in 2011, suggesting that the owl may have dispersed to another site after failing to find a mate. However, likely burrowing owl pellets were found at the site on November 23, 2011. Similar indications of burrowing owl presence have been found every year since 2007, suggesting that although burrowing owl do not typically reside at the Legacy Terrace Development Open Space Preserve for extended periods, they may use the site for brief periods while moving between nearby habitat areas.

The office buildings at the America Center site continued to be vacant throughout 2011, and the site was relatively quiet during all monitoring and maintenance visits. Legacy Partners Commercial personnel mowed the preserve area in early March and in approximately July 2011.

4.0 PROJECT SUMMARY

4.1 Artificial Burrows

Twenty-six artificial burrows are currently present at the Legacy Terrace Open Space Preserve, and these burrows will remain in place for the foreseeable future. As shown in Table 1, 24 burrows were originally installed in 2002, after which two burrows were removed and four were added.

Table 1. Summary of burrow installation and removal at the Legacy Terrace Development Open

Space Preserve

Date	Action	Burrow number	Comment
2002	Burrows installed	1 - 24	Burrows installed following original design scheme.
March 29, 2006	Burrows installed	25 - 27	Burrows installed at top of mounds, where they may be more attractive to burrowing owl and less prone to flooding.
July 5, 2007	Burrow installed	28	Double-chambered burrow installed on top of mound.
January 24, 2008	Burrow removed	1	Burrow removed due to sub-optimal entry tube and erosion near burrow entrance.
Dec. 12, 2008	Burrow removed	24	Burrow removed due to sub-optimal entry tube and erosion near burrow entrance.

4.2 Burrowing Owl Presence

Sightings in late 2010 and early 2011 mark the first time that burrowing owl has been directly observed using the Legacy Terrace Open Space Preserve. However, evidence of site usage by burrowing owl has been found at the site since 2007 (Table 2). Owls regurgitate "pellets" of indigestible food, including the exoskeletons of insects and occasionally fur and bones from small mammals. These distinctive pellets, along with feathers and excrement, have been found near the mitigation burrows. All evidence of site usage by burrowing owl indicates that breeding has not occurred at the mitigation site, but that one or more owls have used the site during the non-breeding season every year starting in 2007.

Table 2. Indications of burrowing owl presence at the Legacy Terrace Development Open Space Preserve.

Date	Indications of Burrowing Owl Presence	Location
July 5, 2007	2 pellets and whitewash found.	Burrow 26
October 15, 2007	Scattered pellets found around the site, not concentrated around a particular burrow.	Burrows 5, 6, 8, and 25
December 12, 2008	Scattered pellets found around the site, not concentrated around a particular burrow.	Burrows 4, 6, 15, and 27
October 9, 2009	1-2 pellets found.	Burrow 27
December 15, 2009	1 pellet found.	Burrow 15
July 20, 2010	1 pellet found.	Burrow 22
November 15, 2010	2 pellets, feathers, and whitewash found.	Burrow 21
December 10, 2010	One adult male burrowing owl observed.	Burrow 26
February 24, 2011	One adult male burrowing owl observed.	Burrow 27
February 24, 2011	Numerous pellets, feathers, and patches of whitewash found.	Burrows 25 and 27
November 23, 2011	Three pellets found.	Near Burrow 15

5.0 CONCLUSION AND RECOMMENDATIONS

Burrowing owl sightings in 2010 and 2011, combined with evidence of consistent site use by owls for five consecutive years, show that mitigation through creation of suitable burrowing owl habitat at the Legacy Terrace Open Space Preserve has been successful. Burrowing owl breeding has not been recorded at the preserve. However, the fact that one or more owls have discovered and used the site suggests that this species may select the Legacy Terrace Development Open Space Preserve as a breeding site in the future.

The following management actions are recommended in order to optimize the Legacy Terrace Development Open Space Preserve for burrowing owl in the future:

- 1. Keep grass and other vegetation as low as possible. Burrowing owl prefers open grassland habitat with good visibility for long distances. The burrowing owl breeding season, from February 1 to August 31, is also the peak of the vegetation growing season in California. Thus, it is important to keep the vegetation at the mitigation site low during this period without disturbing owls that may use the site for nesting. Currently, Legacy implements a well-defined schedule to ensure that grasses are mowed just before the owl breeding season starts, and as needed in order to keep vegetation as short as possible throughout the year. Mowing or other maintenance performed during the burrowing owl breeding season is done in consultation with a qualified biologist, who first conducts a survey of the area.
- 2. Human activity should be controlled. The level of human activity at America Center is difficult to predict. In a best-case scenario, humans and vehicles would come and go from the America Center parking lot without creating a large amount of noise and without disturbing the mitigation area. However, excessive noise, activity, or intrusions could discourage owls from using the mitigation site. Legacy has installed boulders as well as planted shrubs, trees, and groundcover to provide a physical barrier that signals the mitigation area is off-limits. "Keep Out/Owl Mitigation Site" signage has also been installed to provide further site buffering at the edge of the development closest to the mitigation site. Once America Center is occupied, noise and activity levels in the parking area are not anticipated to be excessive.

The fact that owls have used the mitigation site suggests a strong possibility that owls will continue to do so in the future as long as the site is properly managed. The 26 burrows at the mitigation site will remain in place unless management actions require otherwise. The burrows will continue to provide potential habitat for burrowing owl for a number of years to come. This report summarizes the 10th year of maintenance and monitoring on the Legacy Terrace Development Open Space Preserve.

6.0 REFERENCES

- California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocols and Mitigation Guidelines. Sacramento, California.
- California Department of Fish and Game. 2008. Natural Diversity Database (CNDDB), Wildlife and Habitat Data Analysis Branch. Sacramento.
- H.T. Harvey & Associates. 2000. Draft Legacy Terrace Development Burrowing Owl Habitat Management Plan. San Jose, California.
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- WRA, Inc. 2010a. Year 9 Legacy America Center Burrowing Owl Mitigation Monitoring Report. San Rafael, California.
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- WRA, Inc. 2006. Year 4 Legacy America Center Burrowing Owl Mitigation Monitoring Report. San Rafael, California.
- WRA, Inc. 2005. Year 3 Legacy America Center Burrowing Owl Mitigation Monitoring Report. San Rafael, California.
- WRA, Inc. 2004. Year 2 Legacy America Center Burrowing Owl Mitigation Monitoring Report. San Rafael, California.

APPENDIX A FIELD NOTES

Spencer Badet, WRA, Inc. Biologist

Legacy Terrace Development Open Space Preserve, Alviso (13004)

Date/time: February 24, 2011

9:20AM - 11:20AM

Purpose: Burrowing owl artificial burrow monitoring and maintenance.

Weather: Breezy, cool, overcast, scattered showers, ~55F.

Monitors: Spencer Badet

Methods: The owl burrows were observed from the parking lot and from the adjacent slopes of the capped landfill using 8x42 binoculars. The burrows were then approached on foot. All burrows were inspected for owl sign. A string trimmer was used to trim grass around all burrow entrances. Perch stakes were replaced for four burrows. Debris was removed from burrow openings by hand.

Results: One adult male burrowing owl was observed loafing next to burrow #27 upon arrival at the site. This is likely the same owl that was observed at the site in December 2010, sitting in the same location. The owl eventually flushed to a nearby area after being slowly approached on foot. While flushing of the owl was unfortunate, it was considered relatively harmless and necessary to perform maintenance on the burrows. Inspection of the burrow entrances revealed whitewash, feathers, and numerous pellets near the entrances to burrows 25 and 27. Of the remaining burrows and perches, some showed signs of use by skunks, songbirds, and/or ground squirrels, although these burrows showed no conclusive signs of use by owls. Burrows located on top of the earthen mounds, such as 25 and 27, are likely the most attractive to owls due to ideal visibility and fewer problems with flooding.

Grass at the site was generally less than 6 inches in height, although it will grow rapidly in the coming 1-2 months. Keeping the grass low will be an important factor in maintaining the site in a suitable condition for owls. A string trimmer was used to cut the grass as low as possible around the burrow openings in anticipation of this. All grass within an approximate 15-foot radius around burrow 27 was cut as low as possible, as this burrow is apparently the one most favored by the resident owl and mowing may not occur for another 1-2 months.

Other Wildlife Observed: GULL, SAPH, RTHA, WTKI, SOSP, WEME, MODO, ground squirrel (active burrows), coyote (scat).

Spencer Badet, WRA, Inc. Biologist

Legacy Terrace Development Open Space Preserve, Alviso (13004)

Date/time: April 19, 2011

9:15AM - 10:20AM

Purpose: Burrowing owl artificial burrow monitoring and maintenance.

Weather: 60% overcast, calm, ~65F, humid (light rain fell in the past 24 hours).

Monitors: Spencer Badet

Methods: The owl burrows were observed from the parking lot and from the adjacent slopes of the capped landfill using 8x42 binoculars. The burrows were then approached on foot. All burrows were inspected for owl sign. Debris and dead vegetation were removed from burrow openings by hand.

Results: Burrowing owl was not observed at the site, nor did any of the burrows show signs of recent use by burrowing owl (i.e., no pellets, feathers, prey remains, or localized whitewash were observed). The site is apparently not being used by burrowing owl at the present time, and breeding is probably unlikely to occur at the site in 2011.

The preserve area was mowed in March, and the majority of grasses are currently 8-12" in height. Grasses around the burrow openings (which were avoided by the mower and not otherwise trimmed) are 12-18" in height and should be trimmed with a string trimmer during the next site visit.

America Center is still unoccupied, and a chain-link fence blocks the entry road (a gate in the fence was closed and locked during this site visit; it was open during other recent visits). 1-2 contractors were present onsite during the monitoring visit, but there is generally very little activity on the property. Several black-tailed jackrabbit were loafing in the parking lots and access roads. A flock of approximately 150 cliff swallow and 30 barn swallow were actively foraging over the burrowing owl preserve area throughout the duration of the monitoring visit.

Other Wildlife Observed: GULL, RTHA, SOSP, WEME, CLSW, BASW, WCSP, GCSP, black-tailed jackrabbit, ground squirrel (active burrows), coyote (scat).

Spencer Badet, WRA, Inc. Biologist

Legacy Terrace Development Open Space Preserve, Alviso (13004)

Date/time: June 9, 2011

10:45AM - 2:45PM

Purpose: Burrowing owl artificial burrow monitoring and maintenance.

Weather: Clear, sunny, breezy, ~73F

Monitors: Spencer Badet

Methods: The owl burrows were observed from the parking lot and from the adjacent slopes of the capped landfill using 8x42 binoculars. The burrows were then approached on foot. All burrows were inspected for owl sign. Following this survey, a string trimmer was used to cut grasses and other vegetation near the burrow entrances. Grass clippings and debris were removed from the burrow openings by hand, and perch stakes were installed near burrows that lacked perch stakes.

Results: Burrowing owl was not observed at the site, nor did any of the burrows show signs of recent use by burrowing owl (i.e., no pellets, feathers, prey remains, or localized whitewash were observed). The site is apparently not being used by burrowing owl at the present time. Aside from mammal droppings (likely skunk) and signs of ground squirrel activity, there is no indication that the burrows are currently being used by any wildlife species.

The preserve area was last mowed in March, and grasses are currently 4 feet in height—mowing will be recommended to the site manager. Mostly-dry grasses around the burrow openings were 2-3 feet in height, and many of the openings were obscured by vegetation. A string trimmer was used to cut the grass on either end of the two long, narrow earth mounds where the artificial burrows are located. Stakes were installed at three burrows where the perch stakes were missing or rotted away.

America Center is still unoccupied, and a chain-link fence blocks the entry road (a gate in the fence was closed and locked during this site visit; it was open during other recent visits). One contractor was present onsite during part of the monitoring visit, but virtually no human activity was observed on the property. A flock of approximately 80 cliff swallow were actively foraging over the burrowing owl preserve area throughout the duration of the monitoring visit.

Other Wildlife Observed: GULL, SOSP, CLSW, ground squirrel.

Spencer Badet, WRA, Inc. Biologist

Legacy Terrace Development Open Space Preserve, Alviso (13004)

Date/time: August 18, 2011 8:15 - 9:35 AM

Purpose: Burrowing owl artificial burrow monitoring and maintenance.

Weather: Overcast, light breeze, ~70F

Monitors: Spencer Badet

Methods: The owl burrows were observed from the parking lot and from the adjacent slopes of the capped landfill using 8x42 binoculars. The burrows were then approached on foot. All burrows were inspected for owl sign. Grass clippings and debris were removed from the burrow openings by hand, and invasive plants were removed by hand in some areas. The remainder of the mitigation area was also traversed and surveyed.

Results: Burrowing owl was not observed at the site. One pellet composed of small mammal bones and fur was observed near Burrow 25. Patches of small mammal fur that may have been regurgitated were also observed at Burrows 25 and 29. While these may be indications of site use by burrowing owl, it is more likely that the pellet and fur were left by American kestrel, which have been observed using perch stakes at the mitigation site in the past. Burrowing owl may occasionally eat small mammals but more often eat insects and regurgitate pellets composed of insect exoskeletons (based on observations around the Bay Area). No other signs of use by burrowing owl were observed.

At least 5 ground squirrels were observed using perch stakes and adjacent habitat at the mitigation site. Broken snail shells and droppings around the mitigation burrows likely indicate that skunks forage in this area. No other signs of wildlife use of the mitigation burrows were observed, and very few birds of any sort were observed within the preserve area.

The preserve has been mowed since the June 9 monitoring visit, and grasses average approximately 3 inches in height, while late-maturing plants such as *Brassica nigra*, *Sonchus asper*, *Dittrichia graveolens*, and *Lactuca serriola* have re-sprouted from roots and are 12-20 inches in height across much of the preserve. The mounds containing the artificial burrows were not mowed. The area around the burrow openings was cleared with a string trimmer in June and remains relatively free of tall vegetation, but tall (3+ feet) grasses still cover the center of the mounds.

Two patches of yellow star thistle (*Centaurea solstitialis*) were observed in the preserve area, including one on the easternmost side of the eastern burrow mound, and one near the rock wall separating the preserve from the parking lot. This species has not previously been observed onsite. The small size of these patches (approximately 10 feet in diameter or less) and the limited distribution suggest that the species was recently introduced to the site, likely after being transported by vehicles or equipment. Since yellow star thistle is a highly noxious weed that degrades habitat, and since the patches were relatively small and had not yet gone to seed, the plants were removed by hand and transported offsite for disposal in a landfill. Approximately 10% of the plants near the parking lot were not removed due to their small size and time constraints, but

the eradication effort should significantly slow the spread of this species at the site. Additional efforts to locate and remove this plant will be made in the future.

The America Center is still gated with chain-link fence and unoccupied. A crew of contractors was doing work on the exterior of the building using a hanging scaffolding, but no other work was occurring during the site visit.

Other Wildlife Observed: RTHA, NOMO, CLSW, AMKE (likely pellets), ground squirrel, skunk (droppings).

Spencer Badet, WRA, Inc. Biologist

Legacy Terrace Development Open Space Preserve, Alviso (13004)

Date/time: November 23, 2011

11:30AM - 1:30PM

Purpose: Burrowing owl artificial burrow monitoring and maintenance.

Weather: Overcast, light breeze, ~65F

Monitors: Spencer Badet

Methods: The owl burrows were observed from the parking lot and from the adjacent slopes of the capped landfill using 8x42 binoculars. The burrows were then approached on foot. All burrows were inspected for owl sign. Vegetation was removed from around the burrow openings by hand or with a string trimmer. The remainder of the mitigation area was also traversed and surveyed.

Results: Burrowing owl was not observed at the site. Three likely burrowing owl pellets composed of insect exoskeletons were observed approximately 8 feet east of Burrow 15. These pellets appeared to be less than 2-3 weeks old. While these pellets were in the vicinity of Burrow 15, there was no evidence that owls have recently used Burrow 15 or any other burrow. No other signs of use by burrowing owl were observed.

A number of ground squirrels were observed using perch stakes and adjacent habitat at the mitigation site. Ground squirrel burrowing activity at the site is evident in many places, and sizeable tunnels or sediment piles were observed near burrows 2, 9, 21, 23, and 25. Broken snail shells and droppings around the mitigation burrows likely indicate that skunks forage in this area. No other signs of wildlife use of the mitigation burrows were observed.

The preserve area has apparently not been mowed since June-July 2011. While grasses are short (less than 6"), late-growing annual forbs such as black mustard (*Brassica nigra*) and stinkwort (*Dittrichia graveolens*) have grown to approximately 3 feet in height and account for a significant portion of the overall vegetation. These forbs were distributed widely across the preserve area, including the tops of the burrow mounds, the area near the burrow openings, the flat top of the capped landfill, and the sides of the landfill. Weeds in the vicinity of the burrow openings were removed by hand. Following removal of these plants, grasses and other vegetation were removed from the burrow entrances with a string trimmer. The remainder of the preserve area should be mowed in late January or early February 2012, prior to the beginning of the owl breeding season.

The America Center is still gated with chain-link fence and unoccupied.

Other Wildlife Observed: TUVU, SOSP, GULL, BLPH, ground squirrel, black-tailed jackrabbit (droppings), coyote (droppings), skunk (droppings).

APPENDIX B MITIGATION SITE PHOTOGRAPHS





Top: A burrowing owl is barely visible crouching behind a clump of grass, just left of Burrow 27, in February 2011. *Bottom*: Burrowing owl in flight near artificial burrows.

Photographs taken February 24, 2011







Top: Likely burrowing owl pellets near the artificial burrows in November 2011.

Bottom: Ground squirrel burrowing activity has been observed near several burrows.

Photographs taken November 23, 2011







The Legacy Terrace Open Space Preserve before (top) and after (bottom) maintenance in June 2011.



Photographs taken June 6, 2011.